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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Richard A. Bye

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GARLICK HARRISON & MARKISON

P.O. BOX 160727

AUSTIN, TX 78716-0727

EXAMINER

PATEL, HEMANT SHANTILAL

ART UNIT

PAPER NUMBER

2614

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/779,838	Applicant(s) BYE, RICHARD A.	
	Examiner HEMANT PATEL	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 13-48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 13-48 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C.

121:

- I. Claims 1-12, drawn to Voice over Internet Protocol (VoIP) network interface, classified in class 370, subclass 352.
- II. Claims 13-48, drawn to Wireless Local Area Network (WLAN) Access Point (AP), classified in class 455, subclass 554.2.

2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination I has separate utility such as Voice over Internet Protocol (VoIP) network interface for a wired network and it does not require WLAN AP. See MPEP § 806.05(d).

The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a).

Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional

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statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

3. During a telephone conversation with attorney Bruce Garlick on March 12, 2008 a provisional election was made without traverse to prosecute the invention of I, claims 1-12. Affirmation of this election must be made by applicant in replying to this Office action. Claims 13-48 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

4. Claim 4 is objected to because of the following informalities: It recites "the processor that the real-time communication be rerouted via another servicing network". The meaning of this phrase is unclear with respect to the processor. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi (US Patent Application Publication No. 2001/0036190 A1).

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Regarding claim 1, Takahashi teaches of a Voice over Internet Protocol (VoIP) network interface, comprising:

a network interface that communicates with at least one VoIP terminal within a network to service packetized communications (Fig. 4 item 21);

a backbone network interface communicatively coupled to the network interface to service the packetized communications (Fig. 4 item 23);

a processing unit communicatively coupled to the network interface and to the backbone network interface (Fig. 4 item ;

whereby the processing unit determines a communication signature for each of the packetized communications (Fig. 4, item 22 containing item 41); and

whereby the processing unit determines, based upon a corresponding communication signature, whether a packetized communication is a real-time communication Fig. 4, item 22 containing item 42) (Paragraphs 0047-0049, 0067-0072, 0085-0088, 0092-0096, 0111-0121).

Regarding claim 2, Takahashi teaches of the VoIP network interface, whereby the processor directs the network interface and the backbone interface to provide a minimal service level to the real-time communication (Figs. 1-3, 6-7 controller determining the level of voice packet communication).

Regarding claim 10, Takahashi teaches of the VoIP network interface, the real-time packetized communication is an audio communication (Paragraph 0054 and elsewhere in the art).

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7. Claim 4, 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi as applied to claim 2 above, and further in view of Murphy (US patent No. 6,282,192 B1).

Regarding claim 4, Takahashi does not teach of routing the real-time communication via another servicing network.

However, in the same field of endeavor, Murphy teaches of rerouting real-time communication (voice call) between PSTN and VoIP network according to the quality of service for the voice call on VoIP network (Figs. 1-19 and their descriptions).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Takahashi to route call to alternative networks depending on the quality of service for the voice call on VoIP network as taught by Murphy in order to satisfy "many customers request features that place VoIP calls back out on the traditional circuit switched network (hairpinning) when there is IP network congestion or an IP network failure" (Murphy, col. 1 ll. 34-37) by ensuring "a more effective way to provide VoIP call fallback" (Murphy, col. 5 ll. 32-35).

Regarding claim 6, Takahashi teaches of receive signature corresponding to communication received from a corresponding VoIP terminal via the network interface (Paragraphs 0085-0096). Murphy teaches of a transmit signature corresponding to communications received via the backbone interface and intended for the corresponding VoIP terminal (Figs. 2-3, 10-12 and their

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corresponding descriptions; gateways receiving VoIP packets with congestion information from VoIP network).

Regarding claim 7, Takahashi teaches of using the receive signature to determine whether the packetized communication is a real-time communication (Paragraphs 0085-0096).

Regarding claim 8, Takahashi teaches of analyzing receive signature to determine whether the packetized communication is a real-time communication but does not teach of using it for determining problem with VoIP network interface. However, Murphy teaches of analyzing packet signature to determine the problem with the packet sender (Figs. 2-3, 10-12 and their corresponding descriptions; gateways analyzing received VoIP packets for congestion information of sending side). It would have been obvious to a person ordinarily skilled in the art to use the packets received from the network interface to determine problem on the network interface side. In Murphy, the analysis by gateway (Fig. 12 item 108) of packets from Endpoint #1 (Fig. 12) inherently indicates the problem with VoIP network interface (network interface for Endpoint #1 directly connecting to IP network).

Regarding claim 9, Takahashi teaches of the transmit signature to indicating problem with other links of communication path (Figs. 2-3, 10-12 and their corresponding descriptions; gateways receiving VoIP packets with congestion information from VoIP network).

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8. Claim 3, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi as applied to claims 1, 2 above, and further in view of Skemer (US Patent No. 6,570,849 B1).

Regarding claims 3, 5, Takahashi teaches of identifying between real-time communication (voice packets) and non real-time communication (data packets) but does not teach of reducing the service level of non real-time communication.

However, in the same field of endeavor, Skemer teaches of a gateway prioritizing real-time and non-real-time data and reducing the service level of non-real-time data (col. 8 ll. 36-57; col. 11 ll. 53-col. 12 ll. 60).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Takahashi to prioritize real-time and non-real-time data and reducing the service level of non-real-time data as taught by Skemer in order to provide "Voice over IP (VoIP) gateways that provides voice Quality of Service (QoS) comparable to the Time Division Multiplexing (TDM) realm of traditional telephony" (Skemer, col. 5 ll. 32-35).

9. Claims 3, 5, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi as applied to claims 1, 2 above, and further in view of Leung (US Patent Application Publication No. 2002/0087711 A1).

Regarding claims 3, 5, 11, 12, Takahashi does not teach of reducing the service level of non real-time communication, or prioritizing real-time

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communication over non real-time communications, or audiovisual communication for conferencing.

However, in the same field of endeavor, Leung teaches of a gateway and a method wherein the gateway uses various codecs to process audio and video packetized communication and reduces the service level of non voice packets by prioritizing voice communication packets over other packets for any communication including conferencing (Paragraphs 0042-0046, 0051-0053, 0061-0062).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Takahashi with various codecs to process audio and video packetized communication and to reduce the service level of non voice packets by prioritizing voice communication packets over other packets for any communication including conferencing as taught by Leung in order to provide "the ability to optimize voice packets and give them an optimal number of network resources so that they proceed with less interference and delay to their destination" (Leung, Paragraph 0014) and to provide "the ability to increase the number of calls possible during traffic levels that are below the normal range" (Leung, Paragraph 0015).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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US Patent No. 6,359,899	Krishnakumar	
US Patent No. 6,363,065	Thornton	
US Patent Application Publication No. 2002/0078151		Wickam
US Patent No. 6,452,915	Jorgenson	
US Patent No. 6,505,255	Akatsu	
US Patent Application Publication No. 2004/0196786		Laha
US Patent Application Publication No. 2004/0258239		Gallant
US Patent No. 7,209,473	Mohaban	

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEMANT PATEL whose telephone number is (571)272-8620. The examiner can normally be reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Fan Tsang/
Supervisory Patent Examiner, Art Unit 2614

Hemant Patel
Examiner
Art Unit 2614

HSP